

SECTION 3

USACE ADMINISTERED PROJECTS

3-1. General. As the HTRW and OE programs have evolved, more and more response actions and procurements are being issued as negotiated contracts or task orders on large preplaced contracts. Because of the uncertainties inherent in HTRW remedial activities, more contract pricing is now becoming cost reimbursable and less fixed price. This means that fewer contracts are "bid" and the technical requirements provided to the response contractors may be more general in nature and not in the form of rigid specifications. However, the basic information outlined in this section can be applied to all projects if the meaning of the word "bid" is expanded to encompass submittal of cost proposals in a negotiated procurement and the word "specifications" is expanded to mean the technical requirements provided to the contractor along with his more detailed work plan which has been approved by all stakeholders.

3-2. Early Involvement. This subsection covers the functions of the resident engineer/office for HTRW projects that should occur prior to award of the RA contract. The pre-award activities of the RE and staff are primarily that of active assistance to the USACE PM and to the designated design district. The EPA Office of Emergency and Remedial Response (OERR) Directive 9355.0-04B, "Superfund Remedial Design/Remedial Action Handbook," was used in developing a portion of this section on pre-award activities.

a. RI/FS and Record of Decision (ROD). Involvement of the RE at this stage is encouraged in anticipation of performing RA oversight activities and in order to provide the greatest amount of input for selection of an efficient remedy based upon biddability, constructibility, operability, and existing site conditions.

b. RD Phase. Due to USACE mission assignments for the Superfund, DERP, and FUDS programs, the design district may be located in a different geographical area than the HTRW site. In these cases, and in addition to the biddability, constructibility, operability, and environmental (BCOE) reviews during the design stage, the RE may be called upon to perform the quality assurance requirements for the A-E's field investigation activities. The RE can serve as the field point of contact (POC) in order to aid the design district.

3-3. Real Estate.

a. General Considerations. Government and contractor personnel frequently require access to land not owned or controlled by the government during the RI/FS and RD phases of HTRW RA projects. The RE should rely on the Real Estate Division in the appropriate district to obtain the required access and to provide all other real estate support services. However, the

RE should provide local support as needed.

b. Real Estate Planning.

(1) Real Estate representatives will develop a scope of work, cost estimate, and schedule for completing real estate activities for inclusion in a project management plan (PMP), if such a plan is required. The Real Estate representative will also coordinate the analysis of project real estate requirements with other project team members including the RE. This analysis should be provided in the form of a real estate planning report (REPR).

(2) If access to land not owned or controlled by the government is required, it will normally be necessary to obtain a right-of-entry (ROE) or to acquire an interest in real property in order to prevent the occurrence of a trespass or a "taking" of private property under the Fifth Amendment to the U.S. Constitution. The decision whether to obtain a ROE or acquire an interest in real property will depend, in part, upon the purpose for which access is required. If the purpose is to perform survey and exploration work, sampling or short-term construction activities such as the removal of underground storage tanks (UST), then a ROE may be appropriate. However, work involving long-term construction activities or the installation of facilities such as monitoring wells generally requires the acquisition of an interest in real property. Approval to obtain ROEs for any purpose other than survey and exploration work must be obtained from HQUSACE if the acquisition of necessary real property interests has not been authorized.

c. Acquisition of Real Property. The acquisition of any interest in real property, with the exception of non-Superfund leases, must be authorized by HQUSACE through the issuance of a Real Estate Acquisition Directive unless acquisition approval authority has otherwise been specifically delegated to MSCs. Acquisition may be accomplished through negotiations or the initiation of condemnation (eminent domain) proceedings. Persons displaced as a result of the acquisition of real property may be entitled to relocation assistance under Federal law.

d. Additional Considerations for the EPA Superfund Program.

(1) EPA typically obtains access to Superfund sites for design and construction purposes pursuant to its enforcement authority under CERCLA without acquiring an interest in real property. The agency may obtain such access on a voluntary basis through a landowner access agreement or the agency may seek to compel a landowner to provide access by issuing an administrative compliance order or obtaining an injunction or an order in aid of access in Federal district court.

(2) Access to lands adjacent to Superfund sites may be required for support zones, decontamination facilities, stockpile areas, or other purposes. In such cases, EPA may request USACE to acquire appropriate interests in real property pursuant to EPA's acquisition authority

under CERCLA. EPA may also request USACE to perform any temporary or permanent relocations of persons displaced by response actions.

(3) A REPR will be prepared for all projects for which the Corps has been assigned responsibility for RD. The REPR serves as a planning tool to focus project team members on the real estate requirements of a project and any issues, which could lead to cost or schedule growth. The real estate representative, therefore, will coordinate the preparation of the REPR with all team members, including the RE.

(4) The REPR will identify property recommended for acquisition (estate, acreage, ownership); the strategy for relocating individuals, farms and businesses; the estimated cost (lands and damages, relocation assistance, administration, contingencies); and provide a schedule for completing the real estate work. **It is critical** that all real estate requirements be identified as early as possible in the project because a period of 9 months to 1 year is typically required to complete the acquisition process.

e. Additional Considerations for the FUSRAP.

(1) No HQ review or approval of real estate planning documents is required.

(2) To the greatest extent practical, FUSRAP is to be executed utilizing ROEs and without the necessity for real property acquisition. Chiefs of Real Estate at districts and MSCs are authorized to execute ROEs that substantially conform to the approved model.

(3) Any real property interests acquired should, in most instances, be temporary and terminate at the conclusion of remedial action. Chiefs of Real Estate at MSCs are authorized to approve the acquisition of real property interests.

(4) Pursuant to the Memorandum of Understanding (MOU) between USACE and DOE, real property accountability remains with DOE.

f. Additional Guidance. Additional guidance can be found in the following references:

(1) Memorandum, CEMP-RS/CERE-AP, 22 November 1989, Subject: "USACE Real Estate Support for EPA Superfund Program," (Refer to Appendix F);

(2) EPA Publication 9355.5-01/FS, "Real Estate Acquisition Procedures for USACE Projects," (Refer to Appendix F);

(3) HQUSACE DERP/FUDS Program Manual; and

(4) Memorandum, CERE-AP, 6 February 1998, Subject: "Guidance for the Provision of

Real Estate Support to the Formerly Utilized Sites Remedial Action Program and Delegation of Authority to Execute Rights-of-Entry and Acquire Real Property and Interests Therein,” (Refer to Appendix F).

3-4. Planning.

a. The QA plan. Each district office has a generic QA plan that describes projected work load, organization, staffing, responsibilities, training, pre-award activities, post-award activities, testing, and documentation. HTRW considerations should be included in this plan. HTRW training must be included if the office is to conduct any HTRW QA activities. Other areas listed above should also include HTRW specific items unless they are addressed in the supplemental project QA plan (a site-specific supplement to the generic QA plan). A supplemental QA plan should be prepared for each project. For preparation of a QA plan/supplemental project QA plan, (Refer to ER 1180-1-6, "Construction Quality Management").

b. Training. HTRW QA personnel will need additional training to properly carry out their duties. The 40-hour Occupational Health and Safety Administration (OSHA) training and 8-hour recertification (refresher) are required just to get on the job site. Other courses are almost always needed (such as training in technologies, special types of contracts, regulatory compliance, etc.) to properly inspect HTRW work. This training should be identified in the employee's individual development plan.

c. Using Outside Expertise. If the field office administering the HTRW project lacks the necessary experience, coordination should be made for qualified outside personnel to assist. Other construction offices, the district's engineering division, the designated HTRW design district, or A-E services, are all possible sources of qualified personnel. Assistance from competent and qualified industrial hygienist (IH) and safety professionals must be obtained for the review and acceptance of contractor submitted Site Safety and Health Plan (SSHP) and for answering questions concerning project safety and health. It is strongly recommended that the design engineer for engineering and design (E&D) services be included during execution of RA contracts. Confirmation must be made that the required expertise is available. The inability to ensure that engineering division or design district personnel will be available during construction will often dictate that A-E services be obtained. Determining whether or not outside help is needed should be made well in advance to allow necessary transfer of funds. Preferably, this should be done during the design or the BCOE review. This will allow comparison between HTRW training needs and the field office's training plan. Availability of qualified QA personnel should be identified during the design phase of the project.

d. Staffing. Some projects, such as those requiring incineration, may require that QA personnel be on site 24 hours a day, 7 days a week. Others may require more than normal time on site because they have many work features that require QA verification of how something was constructed. Special contract types (i.e., time and materials, cost reimbursable, etc.) may require

more and/or different resources. QA personnel must be prepared to meet these requirements. This may require use of multiple inspectors and payment of hazardous duty, night, holiday, and Sunday differential payments. These requirements must also be identified during the design phase.

e. Chemical Data Quality Management (CDQM). Perhaps the most critical area for QA control is chemical data management. Completion of almost all HTRW projects depends on meeting cleanup standards measured by chemical testing. Strict requirements are placed on the quality of this chemical data. ER 1110-1-263, "Chemical Quality Management for Hazardous, Toxic and Radioactive Waste Remedial Activities," must be used by QA personnel during the RA planning phase. The QA laboratory is a key player in this process and must be involved early on.

3-5. BCOE Reviews.

a. All design reviews should be performed by the individual(s) in the field office who will administer the RA contract. If the field office performing a BCOE review lacks the necessary expertise, assistance should be obtained from other USACE personnel whose expertise matches the project's needs. In this case, the geographical district will be responsible for making arrangements for the experienced personnel to participate in certain activities during design. This effort should be coordinated with the design district that will be funding the effort. Refer to CEMP-CM memorandum, 1 Nov 91, Subject: "Transfer of Knowledge and Experience During Design and Execution of HTRW Projects," for additional information on this subject. A copy of this memorandum is under Appendix F. The following is a suggested list of additional items to be considered by the RE during the BCOE review of HTRW projects:

- (1) Confirm that compliance criteria for selecting an off-site RCRA facility is provided;
- (2) Confirm construction completion, startup, O&M, and transition of facility to follow-on operator requirements are detailed in the contract specifications. The RE should also verify that these requirements are fully coordinated with the facility managers (to whom the completed facility will be turned over; i.e., the state for Superfund projects) before the BCOE review is completed. Specifically, project acceptance criteria, including definition of project completion, must be coordinated, agreed to, and addressed in the contract specifications, to ensure customer satisfaction;
- (3) Confirm that specifications include DQOs required for the preparation of the SAP;
- (4) Confirm that submissions of safety, health and emergency response specifications are sufficient in content and details for the RA contractor to develop a SSHP that is protective of on-site personnel and surrounding communities from the physical, chemical, and/or biological

hazards at the site;

(5) Confirm that specifications include the requirements for the RA contractor (if off-site transportation of hazardous waste is required under the contract) to prepare the manifests and related documents, and to certify that the manifest, packaging, labeling, marking, and placarding of the waste meet all applicable Federal and state regulations. See Section 7 for additional information on manifests, shipping papers and other transportation related requirements;

(6) Review the accuracy of the construction schedule, cost estimate, and any estimated quantities of material. Scheduling considerations include up-front administration and permitting, climate sensitive activities, production rates, etc.;

(7) Confirm that all work area requirements are identified and are adequate for the construction and operation phases;

(8) Ensure permit responsibilities are clearly spelled out in the specifications. Generally, all environmental permits are obtained during the design phase;

(9) Confirm that all field conditions are accurate in the drawings and/or unknown areas are identified. Confirm that representative chemical and geotechnical sampling and analytical data is referenced in the contract documents;

(10) Review the bid schedule for completeness and practicability;

(11) If the work will be performed on a cost reimbursable basis, the RE is advised to become familiar with the content of the following document: A Guide to Best Practices for Cost Reimbursement Contracts. This document is available on the internet at:
<http://hq.environmental.usace.army.mil/tools/reimburse/reimburse.html>

(12) Review Section 11, "Demolition," for additional BCOE considerations; and

(13) Assure that required easements are secured by Real Estate Division prior to award of contract. Failure to do so can cause delays during contract activities.

b. Acquisition Planning.

(1) Written acquisition plans are required for all HTRW work in accordance with Federal Acquisition Regulation (FAR) Part 7. These plans should consider both contract and in-house acquisitions. The RE should be familiar with the overall acquisition plan and strategy in order to participate knowledgeably during the design and acquisition process. The RE is generally

included in the technical evaluation team for negotiated procurement which are common in HTRW projects. It is also common practice to include the RE in writing the formal acquisition plans and participating in the contractor selection process.

(2) Contracting for HTRW work can be significantly different from normal construction and involves many more uncertainties. Technical and regulatory uncertainties are conditions that must be handled at every site, irrespective of the extent of site characterization accomplished. HTRW work is often very expensive to complete and can be even more costly if the wrong contracting approach is used. Section 9, "Contract Types," addresses non-traditional contracting approaches that are well suited for HTRW projects.

c. Interfacing with Regulatory Agencies.

(1) During the pre-award RD phase, the RE may be contacted by local regulatory agencies about the status, time frame and selected remedy at an HTRW site. These regulatory agencies should be referred to the PM. The RE should become familiar with provisions of any interagency agreements and/or consent decrees that might impact work execution at the site or provide for stipulated penalties in the event of schedule delays.

(2) EPA has set forth procedures for addressing compliance with other environmental statutes. For on-site RAs under CERCLA, permits are not required. However, these actions shall comply with the substantive requirements of all Applicable or Relevant and Appropriate Requirements (ARARs) (Federal, state, and local laws) identified in the ROD/Enforcement Decision Document (EDD). If material is to be taken off-site, the receiving facility must possess all appropriate environmental permits identified in the ROD/EDD. EPA regulations require verification of acceptability by EPA of any facility selected for the treatment, storage, and disposal (TSD) of CERCLA waste (Refer to 40 CFR Part 300, Section 300.440). In general, the construction contractor will be responsible for obtaining any necessary non-environmental construction permits and approvals (i.e., building and electrical permits, etc.).

(3) These responsibilities need to be clearly outlined in the contract specifications in order to avoid delays and disputes during RA activities. The RE's responsibility is to verify that the plans and specifications identify all permit requirements.

d. Project Management Plan (PMP). As with the Acquisition Plan, the RE should be included as an active team member in the development of the PMP. This is especially important if there are any identifiable regulatory milestones that the RA contractor will be responsible for meeting. The RE should also attend any pre-award negotiations to be held with the RA contractor.

e. Value Engineering (VE) During the Design Phase.

(1) For CERCLA funded projects, EPA recommends that the USACE and/or the state include VE screening during the design phase for all RA projects where a potential for substantial cost savings exists. The state may be involved in the VE process because it will ultimately contribute to the RA cost.

(2) VE screening performed during the design phase must be limited to project refinements that would not significantly change or alter the approved remedy, unless otherwise approved by EPA. VE screening will consist of listing high cost items that have a potential for cost savings.

(3) Those RA projects which, as a result of the VE screening, show a reasonable promise for significant cost savings will be recommended to EPA for approval of a formal VE study by the USACE or the state. The USACE or the state will identify potential impacts on the RA project schedule and EPA funding requirements for a formal VE study. The RE as well as the HTRW CX should review all VE studies.

f. Pre-Bid Site Inspections. The HTRW design district may task the geographic construction district with the responsibility for coordinating pre-bid/award site inspections by USACE personnel and/or prospective bidders. All site visitors shall follow all applicable OSHA regulations on training, medical surveillance and Personal Protective Equipment (PPE).

(1) For USACE personnel who are required to enter the exclusion zone, an abbreviated SSHP will be prepared by the design district with review and concurrence by the RE and the geographic district Safety and Occupational Health Office (SOHO). The SSHP will cover entrance procedures that should be followed by all visitors. The SSHP should mandate that a log be kept of all individuals that plan on entering the site.

(2) All prospective bidders entering the exclusion zone or who will handle samples, soil/core borings, etc. are responsible for developing their own abbreviated SSHP for the site visit inspection activities. The SSHP shall address, at a minimum, the training and medical requirements, appropriate PPE, and proper disposal of PPE in conjunction with all potential site hazards. Proof of training and compliance with appropriate medical qualifications as required in accordance with the SSHP shall be made available by the prospective bidders if requested by USACE. Hold harmless agreements, signed by the visitors, shall be provided to the USACE representative prior to the prospective bidders entering the exclusion zone. The release should be part of the solicitation documents; the exact wording should be coordinated with the design district Office of Counsel (Refer to sample of a release at Appendix F). The RE shall ensure that the release documentation is maintained as part of the official contract file.

(3) The RE shall coordinate all site visits with the geographic district SOHO and the

design district IH.

g. Funding of RE Pre-Award Activities. The RE should ensure pre-award tasks, particularly the BCOE review, are properly funded by the design district. In most cases, the Corps is required to maintain detailed cost accounting that can be presented as evidence in cost recovery litigation with responsible parties. (Refer to Section 6, "Funding," for further guidance on funding/cost recovery responsibilities). Consult ER 415-1-16, "Fiscal Management," for further guidance on what pre-award activities should be charged to other than the supervision and administration (S&A) account.

h. Community Relations Plan (CRP). EPA is required to maintain a written CRP for Superfund projects. USACE public affairs officers are required to maintain a written CRP for DERP-FUDS projects. For DERP-IRP projects, the installation is responsible for the CRP. The RE should be aware of the support role that will be provided to the EPA RPM or public affairs officer, as appropriate. It is emphasized here that the RE will only provide a support role and will not become the lead in community relations activities (Refer to paragraph 13-3, "Community Relations").

i. Health and Safety. The RE, as the USACE construction manager, must have input on project safety and health issues at the earliest point. Safety and health are the most important considerations of HTRW projects, and the RE with support from the district SOHO shall ensure that the considerations specified in ER 385-1-92 are addressed. Refer to Section 4, "Health and Safety," for additional information on health and safety policies, responsibilities, and criteria.

3-6. Post-Award Activities - General. Just as with any other type of project, the field office will conduct a preconstruction conference, a separate contractor quality control (CQC)/QA coordination meeting, prepare minutes of each, review submittals, conduct inspections, and perform other quality management activities as specified in ER 1180-1-6. HTRW submittals are covered in paragraph 3-11. Some other HTRW aspects of RA implementation are discussed below.

3-7. Preconstruction Conference.

a. The RE on an HTRW project should invite or coordinate the invitations as appropriate for USACE personnel, the respective installation, EPA, state, or local officials, to attend the conference to discuss the scope of work and any pertinent issues on the project. Other invitees may include the QA laboratory and designer.

b. Items that may be discussed, in addition to the items typically discussed at a regular preconstruction conference, are the contractors safety and health program and SSHP to include

activity hazard analyses, inspection/audits, spill and discharge control plan, manifesting, waste and borrow areas, and permits and security. (Note: The SSHP required by the contract satisfies the requirement for submission of an accident prevention plan (Federal Acquisition Regulation (FAR) 52.236-13)).

c. Another item that may be discussed is the SAP. This plan, prepared by the contractor, describes responsibilities and procedures for the specific project to ensure that all data acquired meets the intended purposes of the contract. The SAP is referenced in ER 1110-1-263. This ER also describes a Quality Control Summary Report (QCSR) that is to be prepared by the contractor at completion of the work. This report contains any deviations from the SAP, any problems encountered and corrective actions taken, and data presentation. For sites on the NPL, the QCSR must contain the chemical data required by regulators for deleting the site from the NPL.

d. Frequently, a phased NTP is issued where the contractor may work on submittals or perform nonintrusive site activities, in the support zone or clean areas of the site, pending approval of the SSHP. The SSHP and SAP require acceptance and approval, respectively, before any on-site work commences.

3-8. HTRW Construction Quality Management (QM).

a. Quality Management. QM on HTRW projects is fundamentally the same as on any other project. The CQC system manages and controls the work to ensure it complies with contract requirements. The government QA system ensures that the CQC system is functioning and that the product meets the required level of quality. QM policy and guidance are provided in ER 1180-1-6. While the provisions of ER 1180-1-6 are fully applicable to HTRW work, the nature of HTRW work often presents some unique challenges to QA personnel. QA personnel involved in HTRW work must, therefore, learn how to use some new and different "tools" to ensure that plans and specifications are met. EP 415-1-261, "Quality Assurance Representatives Guide -Volume 5," provides construction representatives with a reliable checklist type reference for each phase of construction for HTRW work.

b. Definable Features of Work. QA personnel must ensure that the defined features of work will allow them to conduct proper QM. The three-phase control system (preparatory, initial, and follow-up inspections) works only if work features have been properly defined. For example, excavation, stockpiling, characterization, transportation, and disposal of contaminated soil might be improperly lumped together under one work feature (such as contaminated soil disposal). The QA personnel might not be able to verify adequacy of field sampling for preliminary separation of soils into hazardous and non-hazardous piles, disposal sampling locations, and loading of trucks (some landfills charge by the truck load regardless of how full the truck is). Without any dishonest intent by the contractor, this could potentially lead to higher disposal costs, improper disposal, or regulatory violations. Both the QA personnel and the contractor must fully understand the critical times at which CQC/QA activities must be

conducted.

c. Three-Phase Control System.

(1) Preparatory Phase. Safety is critical on HTRW projects. QA personnel must ensure the following:

- (a) The site has been set up according to the SSHP;
- (b) The contractor has all prescribed PPE and safety equipment on hand and the equipment is appropriate for the potential on-site hazards. PPE and safety equipment must comply with the requirements of EM 385-1-1. Many specifications require the contractor to provide PPE and safety equipment for QA personnel;
- (c) Calibration and certification of testing and monitoring equipment have been performed;
- (d) Employees performing testing and monitoring have the appropriate training and qualifications; and
- (e) Transportation, disposal, and other required permits have been obtained by the contractor and/or government prior to start of work. Failure to do so could lead to illegal disposal, work delays, and regulatory violations.

(2) Initial and Follow-Up Phases. In most cases, the lack of an obvious sign of contamination will make these inspections challenging. QA personnel must ensure the following:

- (a) Samples are properly taken at the correct locations;
- (b) Samples are handled and transported properly, including chain-of-custody documentation; and
- (c) Procedures outlined in the specifications and approved work plans are strictly followed.

In other words, QA personnel must inspect how contamination is removed and how the site is tested. This again points out the importance of having qualified QA personnel. The activity hazard analysis and spot checks for compliance with safety and health requirements and procedures are revisited during these phases.

3-9. Accountability. HTRW inspections must be well documented and the personnel time

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properly documented. In some cases a "customer," such as EPA, will have additional or special documentation requirements to ensure enforcement actions are properly conducted. Because they are paying for our work, they will also want accurate time/expense records. In other cases, the Government may be seeking reimbursement from PRPs. Cost recovery requires detailed records (which will stand up to legal review) of contractor and USACE work and expenses. Unsigned, incomplete, or inconsistent inspection reports may allow claims by PRPs that the work was not done, or done inefficiently, and should therefore not be paid for.

3-10. Chemical Data Quality Management. Quality management of chemical data is critical to HTRW projects. QA personnel should refer to, and be familiar with, ER 1110-1-263 as well as EM 200-1-1, EM 200-1-3, and EM 200-1-6. These documents define policy for the HTRW CDQM Program. Note that it is the role of the designated project "Chemical QA Function" to perform specified activities which comprise the project-specific approach to CDQM. The Chemical QA Function is performed by USACE personnel (i.e., HTRW Design District technical staff and/or a USACE QA Lab) and can be supplemented or supplanted by contract support under direct management of USACE QA personnel. The Chemical QA Function performs any or all of the following activities: (1) coordinate the request for USACE lab validation for primary laboratory services or evaluate alternative credentials for candidate environmental laboratories; (2) review of contractor personnel qualification documentation contained in the Contractor Quality Control Plan; (3) review of Sampling and Analysis Plans and other reports related to environmental testing; (4) inspection of incoming QA samples to verify that samples have been collected, packaged, and shipped correctly; (5) QA sample analysis; (6) data review as described in EM 200-1-6; (7) generation of the Chemical Quality Assurance Report (CQAR); (8) generation of the Chemical Data Quality Assessment Report; and (9) support audits/oversight of field sampling and laboratory testing activities during RA execution. Further note that both the district construction office's generic Quality Assurance Plan (for HTRW construction projects) and the Supplemental Project QA Plan should establish the project-specific QA compliance monitoring activities as well as the roles and responsibilities for the Chemical QA Function. The project specifications as well as the Sampling and Analysis Plan should reflect these requirements as well. Use of the Chemical Quality Assurance Branch (CQAB) Laboratory (Omaha, Nebraska) for support of the Chemical QA Function is strongly recommended. The Chemical QA Function needs to be coordinated (including transfer of funds) prior to beginning of construction. The following paragraphs discuss details of some key compliance monitoring activities.

a. Review of Sampling and Analysis Plan. HTRW projects require a SAP that includes the project-specific DQOs for the work. EM 200-1-3, "Requirements for the Preparation of Sampling and Analysis Plans," contains guidance on the generation of a SAP. The SAP is composed of two parts: the Field Sampling Plan (FSP); and the Quality Assurance Project Plan (QAPP). The FSP defines the field activities, including all requirements for sampling, field documentation, field tests (e.g., conductivity, pH, etc.), sample packaging and shipping, etc. The

QAPP defines the fixed and field measurement analytical protocol and chemical data reporting requirements. If specified, ten percent of samples are split or collected in triplicate for quality control (QC) and QA testing. This frequency can be increased or decreased based on the type of work and the decision of the management team. ER 1110-1-263 and EM 200-1-6, "Chemical Quality Assurance for HTRW Projects," contain guidance on QC/QA sampling frequency.

b. Pre-Construction Laboratory Validation. If specified, the primary and/or the QA laboratory will be validated by the HTRW CX. Validation of a commercial laboratory by the HTRW CX may take 16 to 24 weeks. EM 200-1-1 contains detailed guidance on laboratory validations with which the RE needs to be familiar. Project funding may be required for CX execution, depending on the program for which RA is being conducted (e.g., FUDS, Army BRAC, Army IRP etc).

c. Laboratory Analysis. QA personnel should ensure that appropriate turn-around times are specified for all primary and, if applicable, QA lab analyses. This will ensure that needed data is available in a timely manner in order to make project decisions. In some instances a cost/benefit analysis is used to determine if mobile laboratory services, or expedited fixed laboratory turnaround times, are necessary to meet project objectives. The Chemical QA Function should be consulted to determine if unreasonably short turnarounds are being identified. These short turnaround times may result in poor quality work by project laboratories.

d. Review of Chemical Data. The overall data review process is specified in the project planning documents. When split sample analysis is being performed, the guidance provided in this paragraph must be followed. QA personnel will receive the contractor's test results. At a minimum, they should review the results for proper sampling procedures (as described in the SAP). Normally, the Chemical QA Function will then review the data. QA samples will be sent to the QA laboratory along with daily quality control reports (when sampling or analyses are involved) and all of the contractor's test results or, at a minimum, all data that is necessary to determine chemical data quality. EM 200-1-6 contains guidance on the data package deliverables. The Chemical QA Function will compare the contractor's sample results against the QA sample results. The QA laboratory will report to the field office on a frequent basis the adequacy and acceptability of the data. The Chemical QA Function will generate the CQAR within 30 days of submission of the contractor's test results.

3-11. Submittals - HTRW Specific.

a. General. HTRW projects have many unique submittal requirements that are not required for non-HTRW projects. The following paragraphs describe some of these HTRW specific submittals and identify the required or recommended reviewers and procedures. Due to the unique nature of HTRW projects, it is highly recommended that the designer be one of the primary reviewers of these documents. In addition, mandatory reviewers for CDQM submittals

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are covered in detail in ER 1110-1-263. Contractual approval authority of these submittals remains with the area/resident office.

b. Sampling and Analysis Plan (SAP). The SAP is a document prepared for all field and laboratory activities, contract deliverables related to the acquisition and reporting of chemical data for HTRW activities. The plan must be approved prior to initiation of any activities involving sampling and/or chemical analysis. Mandatory reviewers of this document are the QA laboratory and the HTRW design district, with monitoring performed by the HTRW CX.

c. Quality Control Summary Report (QCSR). The QCSR, submitted at the end of the contract, addresses chemical quality control practices employed and summarizes the daily quality control reports prepared throughout the project, including all the chemical data and analyses collected/performed (this document may be called the chemical quality management final report). Review and approval of this document is performed by the HTRW design district and the geographic district/field office respectively, with monitoring by the QA laboratory and the HTRW CX. This submittal is not required by regulation, however, some divisions still require its submission.

d. Site Safety and Health Plan (SSHP). The SSHP establishes policies and procedures for protecting workers and members of the public from the specific hazards of the HTRW site for which the plan was developed. The SSHP includes such programs as medical surveillance, monitoring and sampling, emergency response, spill containment, site control, activity hazard analyses, etc. Mandatory review of the SSHP is required by the HTRW design district, the geographic construction district, and the construction district SOHO. The emergency response plan (sub-component of the SSHP) must be coordinated with local officials prior to initiation of any on-site activities. Refer to CB No. 99-2, "Emergency Responder Agreements for Fund-Lead Remedial Actions - EPA Superfund Program," for additional information on emergency response plans.

e. Material Handling Plan (MHP). The MHP consists of procedures for the safe handling of contaminated material, drummed material, and contaminated liquids in addition to procedures for off-site transportation and disposal of materials. Manifesting, Department of Transportation (DOT) shipping papers, and chain-of-custody procedures should also be included. Review should be performed by the area/resident office with assistance from the design district. The construction district SOHO may also be asked to review the MHP if the potential for personnel or public exposure exists. This MHP may also cover importation of clean fill materials for large, grading projects.

f. Spill and Discharge Control Plan (SDCP). The SDCP consists of contingency measures and reporting responsibilities for potential uncontrolled spills and discharges of contaminated and/or hazardous materials. These spills and uncontrolled discharges may include

leachate decontamination water, sewage, and drummed material. Review should be performed by the area/resident office, with the assistance from the design district, and the construction district SOHO.

g. Dust, Vapor, and Odor Control Plan (DVOCP). This plan consists of site procedures to minimize and control the creation of dust, vapors, and odors. Review of this document should be performed by the area/resident office with assistance from the design district.

3-12. Documentation and Record Keeping Requirements.

a. Record keeping is a critical element of the HTRW/environmental restoration mission. Many of the documents created will be made a part of the permanent administrative record for the site. Project records are often solicited through the Freedom of Information Act (FOIA) and play a key role in the recovery of costs from identified responsible parties. All records associated with environmental restoration programs are to be retained permanently, unless otherwise specified in the latest revision of the Modern Army Record Keeping System (MARKS) standards. Please refer to the MARKS standards for guidance concerning appropriate classification, retention, and safeguarding of all documents.

b. In the case of the administrative record, the lead agency or installation for each program or site will become the office of administrative record. The EPA is the office of administrative record for the Superfund program. For the Installation Restoration program, each installation maintains its own records. For FUDS and FUSRAP sites, the executing district serves as the office of administrative record.

(1) Financial Records. Financial documents consist of all records which substantiate the work performed or costs incurred on a project/site. Under the Corps of Engineers Financial Management System (CEFMS), all financial documents, with the exception of invoices, travel receipts, and cost transfer requests are electronic documents. Prior to transferring their disbursing authority to the Finance Center, each USACE Resource Management Office is responsible for retaining the original invoices. All supporting documentation for Superfund credit card purchases is to be maintained by the supporting activity, in accordance with CEFC-AO, Standard Operating Procedure (SOP) No. UFC-13. Only the total page (a copy is acceptable) is required to be sent to the Finance Center for payment. CERM-F memorandum, Subject: "Policy for Retention of Travel Receipts," dated 7 June 1996, provides guidance for retention of travel receipts. The policy includes special instructions for travel associated with the Superfund program. All other financial documents are facsimile copies of electronic records and the retention and security responsibilities for these records reside with the CEFMS Systems staff under the direction of the Finance Center. Working papers used to establish overhead, indirect and burden rates are required to be retained unless the CEFMS Budget Module is used to compute these rates. In accordance with the revised MARKS standards, financial records for

environmental restoration projects will be retained for 30 years. A CECI-IR/CEMP-R memorandum, Subject: "Environmental Classification Standards," dated 10 August 1999 outlines record keeping requirements (see Appendix F). Additional information related to record keeping requirements can be found at the following Internet site:
<http://www.rmd.belvoir.army.mil/markstit.htm>

(2) Contract Records. Official contract records consist of, but are not limited to, those documents detailed on the ENG Forms 3726, 3726-1, and 3726-2 (Official Contract Record Checklist - Pre-award, Contract, and Contract Modification/Delivery Order). The contracting division of the performing district is the custodian of these records and is responsible for their safeguarding. Duplicate copies of official records maintained in other offices are considered working documents, subject to destruction when no longer needed. When a field or area office has been designated as an auxiliary "office of record," documents such as construction surveys, daily inspection reports, progress schedules, etc., must be retired under the same MARKS number as the official contract records in the custody of the USACE performing district contracting division. Upon completion of the work, the completed DD Form 1594 (Contract Completion Statement) must be forwarded to the contracting division for incorporation into the official contract records. The field records will then be reviewed and duplicate copies, considered working documents, removed and destroyed when no longer needed. Contract records include record of procurements made under small purchase authority using DD Form 1155 or other comparable form.

c. Safety Records. Those records relating to HTRW/environmental accidents and incidents reported on ENG Form 3394 for which the USACE performing district safety office is the office of permanent record shall be retained and retired in accordance with the revised MARKS classifications and retentions.

d. Laboratory Test Results. Test reports generated as a result of HTRW/environmental restoration efforts will be released to the individual or office requesting the services. For purposes of retirement, these reports will be incorporated into the site-specific files.

e. Site-Specific Environmental Records. These records consist of documents created in connection with the investigation, planning, design, remedial action, technical assistance and maintenance of projects associated with the HTRW environmental restoration program. Also included are program and project management documents, documents associated with the administrative record, remedial design, remedial action, closeout and other related documents. These records may be created by engineering, program & project management, construction, real estate, drill crews, survey crews and laboratories. While many of these documents may also be maintained by the project manager, a local determination must be made concerning which office will be the office of permanent record for consolidation and subsequent retirement. All duplicate records are to be destroyed when no longer required for daily operations. Consolidated site files

will be retired in accordance with the revised MARKS classifications and retentions.

f. Legal Records. Legal documents include PRP negotiations, Freedom of Information Act (FOIA) records, and documents created to assist the U.S. Department of Justice (DOJ) or EPA in representing the government in liability cases. All legal documents will be maintained by the local office of counsel.

g. Manifest Records. The fully executed original manifest records and all records related to the transport of materials shall be permanently retained. The RE should consult with the customer's representative to ensure timely completion of all reporting requirements. Manifest records shall be retained on site for 3 years in accordance with 40 CFR 262.40. After 3 years, the records shall be incorporated with the site/project file and retired with those records consolidated under "Site-Specific Environmental Records." All other waste shipping papers shall be permanently retained in the site/project file.

h. Contractor Records. The contractor is required to maintain and preserve medical records on employees that are permitted in the support zone for 30 years after leaving employment in accordance with 29 CFR 1910.1020. Contractor maintained records forwarded to the Contracting Officer upon completion of the project consist of training logs, daily reports, weekly safety reports, air monitoring results, laboratory test results, manifest documents, chain-of-custody documents, meteorological records, photographs, decontamination of equipment and vehicles and any other documents that are pertinent to the project. In addition, any contractor operating under a cost reimbursable contract is required to maintain all financial records to support cost recovery.

3-13. Indemnification. CERCLA, as amended by SARA of 1986, provides the President with discretionary authority to hold harmless and indemnify any response action contractor against any liability for negligence arising out of the response action contractor's performance in carrying out response action activities, unless such liability was caused by the conduct of the remedial action contractor (RAC) which was grossly negligent or which constituted intentional misconduct. This indemnification applies only to RAC liability resulting from a release of a hazardous substance or pollutant or contaminant arising out of response action activities. EPA interprets CERCLA Section 119 as authorization for making indemnification available to response action contractors undertaking remedial actions on NPL facilities or removal actions. This includes response action contractors working for USACE in support of the EPA Superfund program. For future Superfund contracts entered into after the effective date of the final guidelines (25 January 1993), indemnification will not be offered except in rare cases and with written authorization from EPA. DOD has elected not to provide indemnification for USACE contracts entered into under DERP.

3-14. Reporting.

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a. Superfund. Each RD/RA district is responsible for management reporting of all Superfund projects. The following management information systems and reports that require the RE's input are utilized to monitor this program as managed by USACE:

(1) USACE Programs and Project Management Information System (PROMIS). HQUSACE requires all Superfund RA projects to be reported in PROMIS. Districts utilize the system to prepare and submit monthly Project Executive Summary (PES) reports on USACE-lead Superfund RD and RA assignments. The RE should assist the PM by providing data related to the RA project for incorporation into PROMIS. Refer to CEMP-RS memorandum, 7 Jan 99, on the implementation of PROMIS (see Appendix F);

(2) In a growing number of construction field offices, the Corps of Engineers utilizes a software package known as the Resident Management System (RMS). This Windows based software has been implemented as the Corps' standard nationwide. The USACE RMS is used for automation and reporting and is linked to PROMIS (downloads information until contract award), CEFMS (exchanges financial data on contracts) and, in the future, will be linked to the Standard Procurement System (SPS). Most of the forms required within USACE field offices have been coded within the RMS software package. In addition, the RMS for Windows program is compatible with various Report Writers, which can be used to generate special purpose forms or reporting processes based upon the users need and/or technical ability; and

(3) SF 1080s should be submitted to the EPA monthly for reimbursement of allowable in-house expenses. EPA regions also require a monthly progress report (prepared by the PM with input from the RE if involving management of RA activities). EPA region reporting requirements are found in the site-specific IAG.

b. Defense Environmental Restoration Program (DERP).

(1) USACE Programs and Project Management Information System (PROMIS). HQUSACE requires all DERP projects to be reported in PROMIS. Since PROMIS has currently no upward reporting capability, districts utilize PROMIS data to prepare and submit monthly PES reports which provide senior management at districts, MSCs and HQUSACE with a brief overview of project status including project background, cost information, schedule, and major projects and issues. The RE should assist the PM by providing data related to the RA project for incorporation into PROMIS.

(2) Refer to paragraph 3-14 a. (2) for information on the USACE RMS.

(3) All program and execution data for the FUDS program are reported by the USACE PM in the automated web-based FUDS Management Information System (FUDS MIS) located at the USACE ERDC.

c. Other Projects. All other projects that fall under Support For Others (SFO), FUSRAP, BRAC, FUSRAP etc., will be reported in PROMIS. The REs are responsible to report the status of remedial action projects as soon as contract award is made to RMS.

3-15. Agreements with Regulatory Agencies.

a. Federal Facility Agreements. Environmental restoration work at active DOD facilities, FUDS, FUSRAP, and civil works facilities may involve Federal IAGs and Federal Facility Agreements (FFAs) that establish certain milestone dates for specific actions and also may entail stipulated penalties. Normally, USACE is party to such agreements on FUDS, FUSRAP, and civil works facilities, whereas the installation is the signature party for active DOD facility sites. However, all regulatory milestones must be met or a new milestone developed, negotiated with the regulator, approved by the regulator, and be **in writing** prior to the expiration of the deadline. On FUDS, FUSRAP, and civil works facilities, USACE has the lead in negotiating revisions to the scheduled milestones. On active DOD facility sites, the installation commander will have the lead with USACE as an active participant.

b. Regulatory Milestones. Missing regulatory milestone dates for submittal of primary documents or schedules, etc., can result in stipulated penalties being assessed by the regulatory agency (EPA in the case of NPL sites). It is the PM's responsibility to carefully monitor compliance with milestone dates and ensure that needed extensions are obtained. REs managing projects that have regulated milestones must be aware of the importance of meeting these milestone dates. In view of the potential for assessment of penalties, the Office of Counsel should be consulted promptly in the event of any questions on the legal implications of non-compliance with milestone schedules. If missing a deadline is anticipated, it should be immediately reported to the USACE PM. The RE will be advised to either revise the schedule or take appropriate action to comply with the established milestone schedule. Under these agreements, REs should understand that written milestone schedule revisions are required to avoid the assessment of penalties. Informal verbal agreements between the RE and regulators may prove inadequate to avoid assessment of penalties should a milestone schedule in the agreement be missed. REs do not have the authority to approve revisions to the milestone schedule contained in the agreement nor to approve changes or deviations requested by involved regulators during performance of the work. All matters concerning these types of issues should be referred to the PM and to the design district.